

31

ambient map display **900** and may be updated in real-time based on polling consumer device location changes.

Advantageously, the visually enhanced merchant indicators of the ambient map display provides an interface particularly adapted for mobile consumer devices. Mobile consumer devices, such as smartphones, navigation devices, or wearables, often include design constraints as dictated by the need for mobility. Some design constraints include single displays with small screen size, as well as the types of user input devices that are available (e.g., touch screen). Here, the ambient map display and merchant indicators may be integrated with a navigation interface to reduce the need for simultaneous multiple application control and interfacing. For example, the control of multiple applications on conventional mobile devices (e.g., separate navigation and consume interfaces) is particularly cumbersome, often requiring the use of a home button, or the like, to exit a current application and enter a mobile operating system desktop display with application icons, and then selection of a particular application icon to bring a second application to the foreground. The ambient map display may provide for the reduction of consumer inputs required to perform complex interactions on a mobile device while executing a navigation process, which may be particularly advantageous in the context of a traveling or otherwise multi-tasking consumer. Furthermore, additional interface efficiencies may be achieved because travel path rerouting based on a selected merchant indicator may be provided to the ambient map display as discussed in greater detail below.

At **622**, the one or more servers **106** may be configured to determine whether to consumer selected a merchant location indicator within the ambient map display. For example, the local merchant location indicators **804** and **904** within ambient map displays **800** and **900** respectively may each be electronic buttons that provide references or links to additional merchant information. In some embodiments, consumer selection of a merchant location indicator may be provided via consumer device inputs to a touchscreen of the consumer device. However, one or more other types of consumer inputs may also be used such as keyboard inputs, voice inputs, mouse inputs, etc.

In response to determining that the consumer has selected a merchant location indicator, method **600** may proceed to **622**, where the one or more servers **106** may be configured to provide a merchant display to the consumer interface. FIG. **10** shows an example of a merchant display **1000** in accordance with some embodiments. For example, in response to the consumer selecting local merchant indicator **1004** within map **1002**, server **106** may be configured to provide the merchant display **1000** including merchant data overlay **1002**. Merchant data overlay **1002** may include directions button **1006**, call button **1008**, and merchant data **1010**. Call button **1008** may be associated with the telephone number of the merchant location, and selection of the call button **1008** may result in the initiation of a telephone dialing process on the consumer device to the associated telephone number. Directions button **1006**, when selected, may result in server **106** providing a directions display to the consumer interface.

FIG. **11** shows an example of a directions display **1100** in accordance with some embodiments. Directions display **1100** may be configured to provide an indication an optimal or recommended path **1106** from the consumer device location **1102** to the selected merchant location **1104** within a map. Direction display **1100** may further include distance indicator **1108**, indicating the distance from consumer device location **1102** to the selected merchant location **1104**

32

along path **1106**, and arrival time indicator **1110** indicating an estimated travel time from consumer device location **1102** to the selected merchant location **1104** along path **1106**. In some embodiments, the path **1106**, distance, and estimated travel time may be determined based on the travel speed and/or mode of transportation of the consumer. For example, the path for a consumer traveling by foot may include sidewalks or walkways that are otherwise inaccessible by an automobile.

Returning to **622**, in response to determining that the consumer has not selected a merchant location indicator within the ambient map display, method **600** may return to **614**, where the one or more servers may be configured to continue to receive, via the network and from the consumer device, consumer device location data indicating a consumer device location of the consumer device. Here, server **106** may be configured to poll the consumer device for the consumer device location, such as at predetermined times. In another example, the consumer device may be configured to push the consumer device location to the server **106**. Server **106** may use the updated consumer device locations to generate and/or update the consumer interface at **616-622** as discussed above. Method **600** may then proceed to **624** and end.

CONCLUSION

Many modifications and other embodiments will come to mind to one skilled in the art to which these embodiments pertain having the benefit of the teachings presented in the foregoing descriptions and the associated drawings. Therefore, it is to be understood that embodiments and implementations are not to be limited to the specific example embodiments disclosed and that modifications and other embodiments are intended to be included within the scope of the appended claims. Although specific terms are employed herein, they are used in a generic and descriptive sense only and not for purposes of limitation.

That which is claimed:

1. A system, comprising:

one or more servers including:

communication circuitry configured to communicate with consumer devices and merchant devices via a network, wherein the merchant devices are associated with a plurality of merchant locations; and processing circuitry configured to:

receive, via the network, transaction data from the merchant devices;

determine an activity level score for each of the plurality of merchant locations based on the transaction data;

receive, via the network and from a consumer device, consumer device location data indicating a consumer device location of the consumer device;

determine, at least in part by comparing the consumer device location and the plurality of merchant locations, one or more local merchant locations proximate to the consumer device location;

generate a consumer interface including an ambient map display, wherein the ambient map display comprises one or more local merchant location indicators associated with the one or more local merchant locations, and wherein at least one of the one or more local merchant location indicators is visually enhanced based on the activity level score for the one or more local merchant locations;